

California Regional Water Quality Control Board
North Coast Region

MONITORING AND REPORTING PROGRAM No. R1-2004-0022
(REPLACES MONITORING AND REPORTING PROGRAM No. R1-2001-06)

FOR

UNOCAL EUREKA TERMINAL
TOSCO
1200 RAILROAD AVENUE
EUREKA

Humboldt County

MONITORING

1. The presence of floating product shall be evaluated in each monitoring well semiannually. If detected, the thickness shall be measured to at least 0.01 foot increments semiannually.
2. The depth to groundwater in each monitoring well shall be determined to at least 0.01 foot increments semiannually. The results of each elevation measurement shall be reported in tabular form indicating the surveyed elevations of each well reference point, depth to groundwater from reference point, and the actual groundwater elevation. The data generated from the elevation readings must be referenced to mean sea level.
3. Each monitoring well shall be sampled according to the following table. The analyses shall be performed as a certified laboratory for Total Petroleum Hydrocarbons as gasoline (TPH-G), Total Petroleum Hydrocarbons as diesel (TPH-D), benzene, toluene, ethylbenzene, xylene (collectively known as BTEX), oxygenates (MTBE), and halogenated volatile compounds (VOC).

WELL	1ST QUARTER	2ND QUARTER	3RD QUARTER	4TH QUARTER
MW-1	TPH-D			
MW-2	TPH-D			
MW-3	TPH-D, TPH-G, BTEX, MTBE		TPH-D, TPH-G, BTEX, MTBE	
MW-4	TPH-D, TPH-G, VOC		TPH-D, TPH-G, VOC	
MW-5	TPH-D, TPH-G		TPH-D, TPH-G	
MW-6	THP-D			
MW-7	TPH-D, TPH-G		TPH-D, TPH-G	
MW-13	TPH-D			
MW-15	TPH-G, BTEX, MTBE		TPH-G, BTEX, MTBE	
MW-16	TPH-D, TPH-G, BTEX, MTBE		TPH-D, TPH-G, BTEX, MTBE	
MW-17	TPH-D, TPH-G, BTEX, MTBE		TPH-D, TPH-G, BTEX, MTBE	
MW-19	TPH-D			
MW-20	TPH-D			
MW-22	TPH-D			
MW-24	TPH-D, TPH-G			

WELL	1ST QUARTER	2ND QUARTER	3RD QUARTER	4TH QUARTER
MW-25	TPH-D			
MW-26	TPH-D, TPH-G, BTEX, MTBE		TPH-D, TPH-G, BTEX, MTBE	
MW-27	TPH-D, TPH-G, BTEX, MTBE		TPH-D, TPH-G, BTEX, MTBE	
MW-28	TPH-D, TPH-G, BTEX, MTBE		TPH-D, TPH-G, BTEX, MTBE	
MW-29	TPH-D, TPH-G, BTEX, MTBE, VOC		TPH-D, TPH-G, BTEX, MTBE, VOC	
MW-30	VOC		VOC	
MW-31	TPH-D, VOC		TPH-D, VOC	
MW-32	TPH-D, TPH-G, MTBE, VOC		TPH-D, TPH-G, MTBE, VOC	
MW-33	TPH-D			
MW-34	TPH-D, TPH-G, BTEX, MTBE		TPH-G, BTEX, MTBE	

- All monitoring wells will be sampled for Total Oil & Grease on a one time basis. All wells having detectable levels of oil & grease shall be resampled once every two years.
- All new monitoring wells will be sampled quarterly for TPH-G, TPH-D, BTEX, MTBE, and VOCs.

REPORTING

A ground water elevation contour map for each transmissive zone shall be submitted for each semiannual set of measurements and include the facility, groundwater flow pattern including the direction of the groundwater gradient, and the location of the wells measured.

A map for each transmissive zone shall be submitted for each semiannual set of measurements that indicates the boundary of the dissolved and separate phase hydrocarbon plumes. Individual maps will be submitted for TPH-G, TPH-D, BTEX, VOC, MTBE, and Total Oil & Grease.

Semiannual monitoring reports, including semiannual gradient data and sampling data, shall be submitted to this office in accordance with the following schedule:

Reporting period

January, February, March, April, May, June
July, August, September, October, November, December

Due Date

July 15
January 15

Ordered by



Catherine E. Kuhlman
Executive Officer

March 15, 2004